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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,411	01/11/2006	Neil Edwin Wallace	201144.00006	8978

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EXAMINER	
HOOK, JAMES F	

ART UNIT	PAPER NUMBER
3754	

NOTIFICATION DATE	DELIVERY MODE
07/22/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/564,411	WALLACE ET AL.	
	Examiner	Art Unit	
	James F. Hook	3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-30,32,33,35-47,49,50,52-69 and 72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-30,32,33,35-47,49,50,52-69 and 72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 32 is objected to because of the following informalities: it is dependent upon a canceled claim, for purposes of this action the claim will be considered as dependent from claim 30. Appropriate correction is required.

Claim 49 is objected to because of the following informalities: it is dependent upon a canceled claim, for purposes of this action the claim will be considered as dependent from claim 47. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27, 28, 30, 32, 35, 38-42, 44, 45, 47, 49, 52, 55-59, 61-63, 65-69, and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Andre (317). The reference to Andre discloses the recited article formed from sheet metal with at least one lock seam, the lock seam includes a region where the edge margins overlap and wherein at least one of the edge margins has a coating 28 applied to it (see figures 10 and 11) in the overlap and forms a gasket to provide a watertight joint at the lock seam, the coating is inherently compressed in the overlap when the seam is formed by bending the sheet metal, the film is polymeric formed along a major surface of the side

to provide moisture and chemical resistance, the polymeric material can be polyethylene or PVC, at least one edge portion is disposed around the edge portion of the other edge margin so the first portion abuts one side of the end portion and a second portion that abuts the other side of the end portion, the edges are generally flat and the edge margins can be cambered, the article is a metal spiral wound pipe.

Claims 27, 38, 39, 41, 44, 55, 56, 58, 61, 65-69, and 72 are rejected under 35 U.S.C. 102(b) as anticipated by Bundy. The reference to Bundy discloses the recited article formed from sheet metal 12 with at least one lock seam, the lock seam includes a region where the edge margins overlap and wherein at least one of the edge margins and a majority of the surface of the strip has a moisture barrier 13 which in the overlap forms a gasket to provide a watertight joint at the lock seam, the film is metallic and formed along a major surface of the side to provide moisture and chemical resistance, the polymeric material, coatings on an entire side can be provided as seen in figure 2 on both sides to protect the metal, at least one edge portion is disposed around the edge portion of the other edge margin so the first portion abuts one side of the end portion and a second portion that abuts the other side of the end portion, the edges are generally flat, the article is a metal pipe.

Claims 27, 38, 39, 41, 42, 44, 55, 56, 58, 61, 65-69, and 72 are rejected under 35 U.S.C. 102(b) as anticipated by Eldred. The reference to Eldred discloses the recited article formed from sheet metal 1 with at least one lock seam, the lock seam includes a region where the edge margins overlap and wherein at least one of the edge margins and a majority of the surface of the strip has a moisture barrier 2 which in the overlap

forms a gasket to provide a watertight joint at the lock seam, the film is metallic and formed along a major surface of the side to provide moisture and chemical resistance, the polymeric material, coatings on an entire side can be provided as seen in figure 1 on both sides to protect the metal, at least one edge portion is disposed around the edge portion of the other edge margin so the first portion abuts one side of the end portion and a second portion that abuts the other side of the end portion, the edges are generally flat, the article is a metal pipe.

Claims 27, 35, 38, 39, 41, 42, 44, 52, 55, 56, 58, 59, 61, 65, 68, 69, and 72 are rejected under 35 U.S.C. 102(b) as anticipated by Roemer. The reference to Reomer discloses the recited article formed from sheet metal 1 with at least one lock seam, the lock seam includes a region where the edge margins overlap and wherein at least one of the edge margins and a majority of the surface of the strip has a moisture barrier 2 which in the overlap forms a gasket to provide a watertight joint at the lock seam, the film is a rubber and formed along a major surface of the side to provide moisture and chemical resistance, the polymeric material, coatings on an entire side can be provided as seen in figure 1 on both sides to protect the metal, the edges are generally flat, the article is a metal pipe.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 33, 36, 37, 50, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andre (317). The reference to Andre discloses all of the recited structure with the exception of stating specific thickness ranges of the materials. It would have been obvious to one skilled in the art to modify the thicknesses in Andre to be of any thickness as such are obvious choices of mechanical expedients and would only require routine experimentation to optimize values to meet the needs of the users to save money on materials and meet specific weight needs.

Claims 32, 35, 42, 49, 52, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beveridge (492) in view of Andre (317). The reference to Beveridge discloses all of the recited structure with the exception of which polymeric materials are used for the sealing layer and using a spiral seam. It would have been obvious to one skilled in the art to modify the polymeric material of Beveridge to be formed of any known polymeric material where the use of PVC or polyethylene is old and known in the art as taught by Andre and to form a spiral seam where such is an equivalent material used for such layers in lock seam articles and would insure a proper seal and protection of the layers and is an alternate known manner to form a lock seam in a sheet metal article.

Claims 36, 37, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldred or Bundy. The references to Eldred and Bundy disclose all of the recited structure with the exception of stating specific thickness ranges of the

materials. It would have been obvious to one skilled in the art to modify the thicknesses in Eldred or Bundy to be of any thickness as such are obvious choices of mechanical expedients and would only require routine experimentation to optimize values to meet the needs of the users to save money on materials and meet specific weight needs.

Claims 29, 43, 46, 60, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andre (317) in view of Beveridge (492). The reference to Andre discloses all of the recited structure with the exception of bending the seam by 10-50% such that it would compress the layer by the same amount, and making such into a tank. The reference to Beveridge discloses the recited article formed from sheet metal 6 with at least one lock seam, the lock seam includes a region where the edge margins overlap and wherein at least one of the edge margins has a coating 4a,b applied to it (see figures 3-6) in the overlap and forms a gasket to provide a watertight joint at the lock seam, the coating is compressed in the overlap when the seam is formed by bending the sheet metal in a range of 10-50% of its original thickness as seen, the film is polymeric formed along a major surface of the side to provide moisture and chemical resistance, the polymeric material, coatings on an entire side can be provided as seen in figure 2 on both sides to protect the metal, at least one edge portion is disposed around the edge portion of the other edge margin so the first portion abuts one side of the end portion and a second portion that abuts the other side of the end portion, the edges are generally flat and the edge margins can be cambered, the article is a metal pipe which is then formed into a metal tank, and the extra seal 4a,b is provided only at the lock seam whereas the coatings can be applied over an entire side. It would have

been obvious to one skilled in the art to modify the pipe of Andre to be formed as a tank and to bend the seam together by 10-50% which would inherently compress the coating of Andre by the same amount inherently, as suggested by Beveridge where such is a known equivalent use for a spiral formed pipe and such would insure the coating layer created a good seal inherently.

Response to Arguments

Applicant's arguments filed April 21, 2010 have been fully considered but they are not persuasive. Most of the arguments are moot based upon the new rejection set forth above. With respect to Andre, the coating 28 such as seen in figure 11 which is also a lockseam has coating 28 along the length of the strip and such is applied as per the method shown in figure 5 which shows an extrusion method of extruding the material onto the strip as it is wound into the lock seam shape, therefore its a polymer coating that covers a major surface of the strip, and as seen in figure 11 the liner material 28 adheres to itself to seal the seam.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to Blakeway disclosing a state of the art lock seam article.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James F. Hook/
Primary Examiner, Art Unit 3754

JFH